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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,196	09/23/2003	Robert George Bean	STL11422	2633
7590	04/07/2006		EXAMINER	
David K. Luente Seagate Technology LLC Intellectual Property - COL2LGL 389 Disc Drive Longmont, CO 80503			PUENTE, EMERSON C	
			ART UNIT	PAPER NUMBER
			2113	
			DATE MAILED: 04/07/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/669,196	BEAN ET AL.
	Examiner	Art Unit
	Emerson C. Puente	2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 September 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/23/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

This action is made **Non-Final**. Claims 1-21 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19 and 20 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 19, the claim limitation cites “wherein the first information is appended to the first data”. Furthermore, the base claim 15 discloses, “...first information accompanying first data, wherein the first information indicates the status of second data associated with the first data.” However, the specification discloses “The present invention removes the need for the FE-Bit table...Referring to FIG. 4A, a storage scheme of the present invention is illustrated. A data block 400 is shown that includes a data portion 410 and appended information 420.” In other words, if a data block includes a data portion (first data) and appended information (first information), there is no need of a FE table (second data). Thus, the embodiment of “wherein the first information indicates status of second data associated with the first data,” as disclosed in the base claim, would not include “first information appended to the first data.”

In regards to claim 20, the claim limitation cites “wherein the first information is embedded in the first data”. Furthermore, the base claim 15 discloses, “...first

information accompanying first data, wherein the first information indicates the status of second data associated with the first data.” However, the specification discloses “The present invention removes the need for the FE-Bit table...Referring to FIG. 4A, a storage scheme of the present invention is illustrated. A data block 400 is shown that includes a data portion 410 and appended information 420.” In other words, if a data block includes a data portion (first data) and appended or embedded information (first information), there is no need of a FE table (second data). Thus, the embodiment of “wherein the first information indicates status of second data associated with the first data,” as disclosed in the base claim, would not include “first information embedded in the first data.”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,774,643 of Lubbers et al. referred hereinafter “Lubbers”.

In regards to claim 1, Lubbers discloses:

storing first information with first data, wherein the first information directly indicates the status of the first data (see figure 2 and column 6 lines 43-52).

In regards to claim 2, Lubbers discloses:

wherein the status indicates a reliability of the first data (see figure 2 and column 6 lines 45-52).

In regards to claim 3, Lubbers discloses:

wherein the first information is a data reliability qualifier bit (see figure 2 and column 6 lines 45-52).

In regards to claim 4, Lubbers discloses:

wherein the first information is embedded with the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 5, Lubbers discloses:

wherein the first information is appended with the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 6, Lubbers discloses:

storing second information with second data, the second information indicating the status of the first data (see column 6 lines 64-65).

In regards to claim 7, Lubbers discloses:

wherein the second information is set to indicate that the first data is unreliable (see figure 2 and column 6 lines 64-65).

In regards to claim 8, Lubbers discloses:

accompanying first information with first data, wherein the first information indicates status of second data associated with the first data (see figure 2 and column 6 lines 43-52 and 64-65)

In regards to claim 9, Lubbers discloses:

wherein the status indicates a reliability of the second data (see figure 2 and column 6 lines 43-52 and 64-65).

In regards to claim 10, Lubbers discloses:

wherein the first information is a data reliability qualifier (see figure 2 and column 6 lines 45-52).

In regards to claim 11, Lubbers discloses:

wherein the first data is parity data (see column 6 lines 45-52).

In regards to claim 12, Lubbers discloses:

wherein the first information is set to indicate that the second data is unreliable (see column 6 lines 64-65).

In regards to claim 13, Lubbers discloses:

storing second information to the second data, the second information indicating the status of the second data (see column 6 lines 45-52).

In regards to claim 14, Lubbers discloses:

wherein the second information is set to indicate that the second data is unreliable (see column 6 lines 45-52).

In regards to claim 15, Lubbers discloses:

storage areas (see figure 2 and column 6 lines 43-52 and 64-65); and circuitry configured to perform at least one of a group consisting of a reading and a writing of the storage areas, wherein at least one of the storage areas includes first information accompanying first data, wherein the first information indicates status of second data associated with the first data (see figure 2 and column 6 lines 43-52 and 64-65).

In regards to claim 16, Lubbers discloses:

wherein the circuitry includes a controller that is adapted to store the first information with the first data (see column 6 lines 64-65).

In regards to claim 17, Lubbers discloses:

wherein at least another of the storage areas includes second information stored with the second data that indicates a status of the second data (see figure 2 and column 6 lines 43-52).

In regards to claim 18, Lubbers discloses:

wherein the storage areas are in a RAID configuration (see column 5 lines 44-45).

In regards to claim 19, Lubbers discloses:

wherein the first information is appended to the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 20, Lubbers discloses:

wherein the first information is embedded in the first data (see figure 2 and column 6 lines 20-25).

In regards to claim 21, Lubbers discloses:

wherein the first information and the first data are generated by the same function (see column 6 lines 44-45).

Claims 1-5,8-12, 15, 16, and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,379,411 of Morgan et al. referred hereinafter "Morgan".

In regards to claim 1, Morgan discloses:

storing first information with first data, wherein the first information directly indicates the status of the first data (see column 6 lines 21-28).

In regards to claim 2, Morgan discloses:

wherein the status indicates a reliability of the first data (see column 6 lines 21-28).

In regards to claim 3, Morgan discloses:

wherein the first information is a data reliability qualifier bit (see column 5 lines 60-65 and column 6 lines 21-28).

In regards to claim 4, Morgan discloses:

wherein the first information is embedded with the first data (see column 5 lines 60-65).

In regards to claim 5, Morgan discloses:

wherein the first information is appended with the first data (see column 5 lines 60-65).

In regards to claim 8, Morgan discloses:

accompanying first information with first data, wherein the first information indicates status of second data associated with the first data. Morgan discloses blocks of data with code byte and check bytes, indicating accompanying first information with first data (see column 5 lines 60-65). Morgan further discloses the code byte is reset to indicate the data transfer was successful, which indicates no fault in the data (see column 6 lines 23-28), indicating first information indicates status of second data associated with the first data.

In regards to claim 9, Morgan discloses:

wherein the status indicates a reliability of the second data (see column 6 lines 23-28).

In regards to claim 10, Morgan discloses:

wherein the first information is a data reliability qualifier (see column 6 lines 23-28).

In regards to claim 11, Morgan discloses:

wherein the first data is parity data (see column 4 lines 15-25).

In regards to claim 12, Morgan discloses:

wherein the first information is set to indicate that the second data is unreliable (see column 6 lines 23-28).

In regards to claim 15, Morgan discloses:

storage areas (see column 4 lines 15-25); and

circuitry configured to perform at least one of a group consisting of a reading and a writing of the storage areas, wherein at least one of the storage areas includes first information accompanying first data, wherein the first information indicates status of second data associated with the first data. Morgan discloses blocks of data with code byte and check bytes, indicating accompanying first information with first data (see column 5 lines 60-65). Morgan further discloses the code byte is reset to indicate the data transfer was successful, which indicates no fault in the data (see column 6 lines 23-28), indicating first information indicates status of second data associated with the first data.

In regards to claim 16, Morgan discloses:

wherein the circuitry includes a controller that is adapted to store the first information with the first data (see column 5 lines 55-65).

In regards to claim 18, Morgan discloses:

wherein the storage areas are in a RAID configuration. Morgan discloses parity bytes, indicating a RAID configuration (see column 4 lines 19-23).

In regards to claim 19, Morgan discloses:

wherein the first information is appended to the first data (see column 5 lines 60-65).

In regards to claim 20, Morgan discloses:

wherein the first information is embedded in the first data (see column 5 lines 60-65).

In regards to claim 21, Morgan discloses:

wherein the first information and the first data are generated by the same function (see column 5 lines 55-65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C Puente whose telephone number is (571) 272-3652. The examiner can normally be reached on 8-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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